Abstract

A magnetic resonance imaging apparatus 20 includes a scan executing unit that executes scan to generate sensitivity map data of an RF coil 24, a region reduction unit 44b that applies region reduction to a signal region near a no-signal region of image data obtained by the scan, a sensitivity map data generating unit 44 that generates sensitivity map data using image data after the region reduction, and a smoothing processing unit 44i that applies three-dimensional smoothing filter to the sensitivity map data.